

UNIVERSIDAD DE LAS FUERZAS ARMADAS ESPE
DEPARTAMENTO CIENCIAS DE LA COMPUTACIÓN

Web System Fundament

Name: Wendy Cueva

NRC: 4628

Date: 12/06/2022

Aplicación Web Progresiva

- *What is a progressive web app?*

Progressive Web Applications (PWA) are a new generation of applications that take advantage of the main web technologies. We also refer to a web application in the middle of being an ordinary app, one that needs to be installed on the device and a website that runs inside of the browser.

- *How to implement a progressive web app?*

1.- Valid secure HTTPS connection

The HTTPS protocol means that users can feel relatively safe allowing permissions to the PWA. Since network requests are routed through a service worker script. In addition, it allows heavy code to run in the background, so that multiple long tasks don't block the user interface.

When security is added to the page, this generates trust among users for their free navigation, since several pages may ask for information from people, where it must be protected privately.

2.- Valid installed JSON Manifest

“By providing a data extract in JSON format, it is possible to cache this information with the help of the service worker. The app shell is then used to load the CSS rules so that an offline version with full UI capabilities can be delivered” (Ramírez, 2018).

This shell is a self-contained container that has all the style sheets, scripts, images, fonts, and HTML output necessary for a user to render a complete page.

3.- Service Worker installed

By listening to network requests on the server, but being located as a .js file on the user's device, the service worker will handle those requests with appropriate responses, depending on the available internet connection.

On the other hand, users of Android phones and other compatible devices will need to add PWA to their home screen. That is, an icon similar to that of an application will appear but it will run in a browser.